

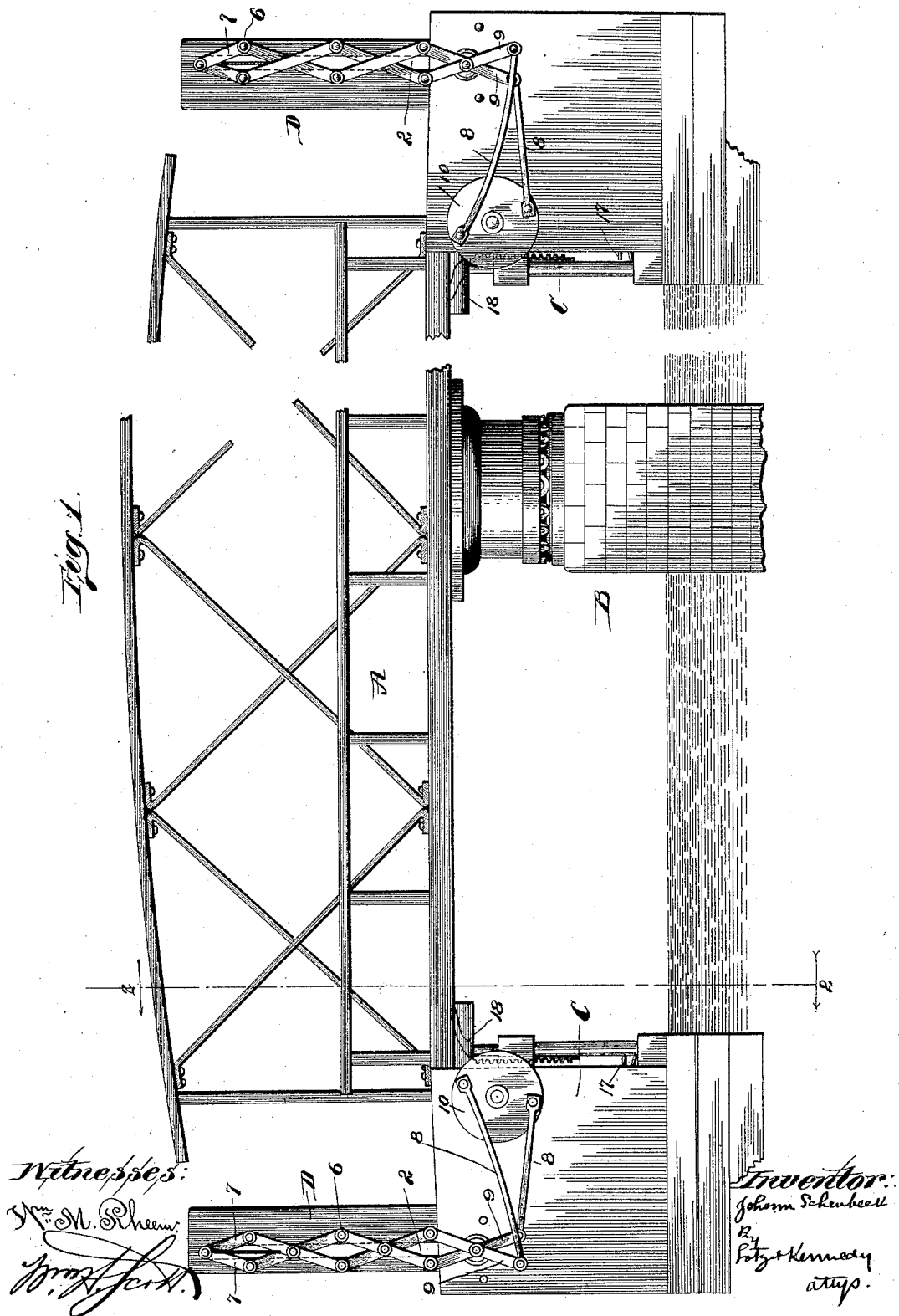
(No Model.)

2 Sheets—Sheet 1.

J. SCHEUBECK.
BRIDGE GATE.

No. 469,321.

Patented Feb. 23, 1892.



(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

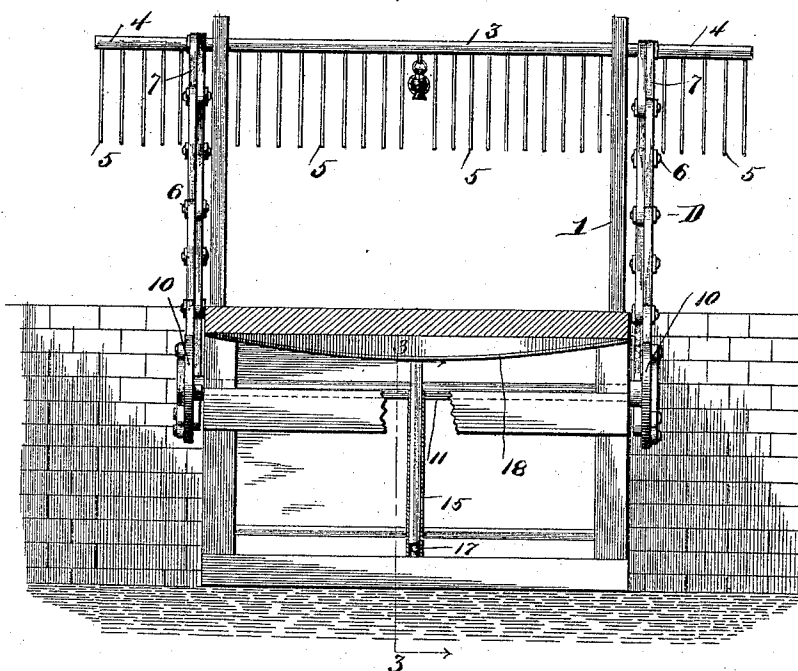


Fig. 3.

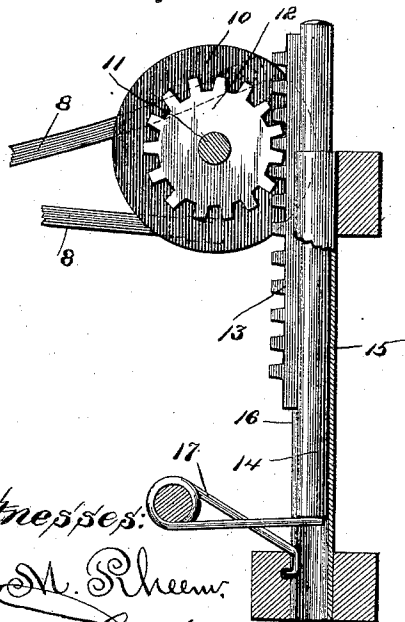
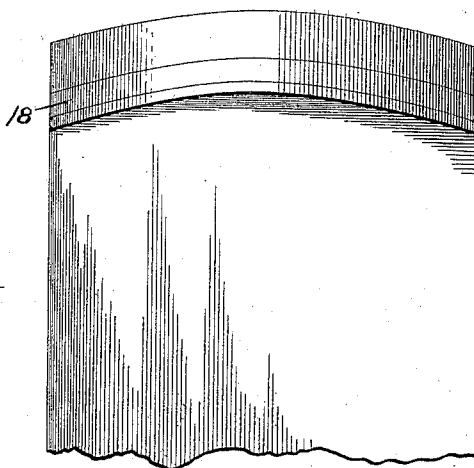


Fig. 4.



Witnesses:

Wm. M. Rheem.
Attest.

By

Inventor
Johann Scheubeck
L. H. Kennedy
Attest.

UNITED STATES PATENT OFFICE.

JOHANN SCHEUBECK, OF CHICAGO, ILLINOS.

BRIDGE-GATE.

SPECIFICATION forming part of Letters Patent No. 469,321, dated February 23, 1892.

Application filed May 18, 1891. Serial No. 393,159. (No model.)

To all whom it may concern:

Be it known that I, JOHANN SCHEUBECK, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bridge-Gates, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to automatic gates for pivoted or swinging draw-bridges, the object being to provide a device of this character of simple, durable, and efficient construction.

The invention consists in the features of construction and combinations of parts hereinafter fully described and specifically claimed.

In the accompanying drawings, Figure 1 is a side elevation of a bridge and gates constructed in accordance with my invention. Fig. 2 is a vertical cross-sectional view on the line 2 2 of Fig. 1. Fig. 3 is a vertical sectional view on the line 3 3 of Fig. 2, and Fig. 4 is a bottom plan view of the end of the bridge.

Referring to said drawings, A indicates the bridge mounted upon the pier B in a familiar manner.

C C indicates the abutments.

D D indicate the gates as a whole, and as their construction and the construction of the devices for operating them are similar a description of one will suffice.

Posts 1 are arranged at opposite sides of the roadway and are provided with upright slots or guideways 2, in which the gate proper travels. The gate comprises a bar 3, having its end portions passing through the guideways 2 and connected outside of the posts with devices for raising and lowering said bar. In the construction illustrated the gate is shown in connection with a double or wide roadway and the footways are located outside of the posts. The bar 3 is therefore extended over the footways, as shown at 4. The bar 3 and extensions 4 are provided with downwardly-extending rods 5, forming a complete barrier when the bar is lowered.

The devices for raising and lowering the bar consist of a system of levers 6, constructed

on the principle of the lazy-tongs and the upper members 7 of which are pivoted to the bar 3, just outside of the posts 1. Connecting rods or links 8 are pivoted at one end to the lower members 9 of said lazy-tongs levers 6 and at their other ends are pivoted to a crank-disk 10, rigidly mounted upon a transverse shaft 11, supported in bearings on the abutment. About midway between the ends of said shaft a gear-pinion 12 is mounted thereon, and said gear-pinion intermeshes with a toothed rack-bar 13, secured to an upright rod 14, which is located and slides within an upright tube 15, having a slot 16 at one side, through which the rack-bar projects. A spring 17 is arranged to exert an upward pressure upon the rod 14. The upper end of the rod 14 is located in position to be engaged by a cam-surface 18 upon the lower face of the end portion of the bridge and the highest part of the cam-surface is at the middle of the bridge, so that when the bridge is closed, Figs. 1 and 2, and the rod 14 depressed to the lower limit of its movement the gate will be elevated. When the bridge opens (in either direction) the cam-surface 18 will allow the rod 14 to rise under the influence of the spring 17 and the weight of the gate in falling. When the bridge closes, the cam-surface will depress the rod 14, and through the intermediacy of the gearing described the gate will be elevated.

It will of course be understood that various mechanical changes can be made in the construction of the parts. For instance, the spring-resistance to the depression of the rod 14 could be secured in various ways. It will be further seen that the rod 14 could be arranged otherwise than in an upright position and the cam correspondingly located and still be within the scope of my invention. It is obvious that on a narrow roadway the posts 1 could be located at the extreme sides of the road, in which case the bar 3 would not have the extensions 4.

I claim as my invention—

1. A bridge-gate comprising a gate located to slide in upright guideways, a system of lazy-tongs levers connected with said gate, links connected to said levers and pivoted to crank-disks carried by a revoluble shaft, and

a gear-pinion on said shaft which intermeshes with a movable rack-bar located in the path of a cam-surface on the bridge.

2. A bridge-gate comprising a gate located
5 to slide in upright guideways, a system of
lazy-tongs levers connected with said gate,
links connected with said levers and pivoted
to crank-disks carried by a revoluble shaft, a
gear-pinion on said shaft which intermeshes
10 with a movable rack-bar located in the path

of a cam-surface on the bridge, and a spring acting upon said rack-bar in opposition to said cam-surface.

In testimony whereof I affix my signature in presence of two witnesses.

JOHANN SCHEUBECK.

Witnesses:

WM. H. LOTZ,

HARRY COBB KENNEDY.